PATENT ABSTRACTS OF JAPAN

(11) Publication number: 09-160852

(43) Date of publication of application : 20.06.1997

(51) Int. C1. G06F 13/00

H04N 7/173

(21) Application number : **07-316156** (71) Applicant : **NIPPON TELEGR &**

TELEPH CORP <NTT>

(22) Date of filing: 05.12.1995 (72) Inventor: HIGAKI HIROAKI

OTOMO KENJI HIRAKAWA YUTAKA

(54) INFORMATION PROVIDING DEVICE

(57) Abstract:

PROBLEM TO BE SOLVED: To make even a user unfamiliar to the usage of a computer to easily acquire necessary information concerning an information providing device which provides information to the user in the combination of broadcasting media and communication media from a computer network.

SOLUTION: When a user request acquiring part 21 obtains a request for acquiring detailed information while outline information provided from broadcasting media is received by a broadcasting reception terminal 1a time obtaining part 22 obtains the time at the time of requesting and a channel number obtaining part 23 obtains the channel number of an outline broadcasting so that these are made to be a pair and transmitted to an address translating part 31. The address translating part 31 converts a pair of the obtained time and the channel number into the address of an information server 4 and transmits it to a detailed information requesting part 24. The detailed information requesting part 24 obtains required detailed information from the information server 4 through the use of the address of the information server 4.

CLAIMS			

[Claim(s)]

[Claim 1]1st means to acquire a channel designator which it is at this time [which acquired summary information broadcast in order to make a user choose detailed information from a broadcast receiving terminal] and time acquisition timeand a broadcast receiving terminal had chosen2nd means to acquire an address of an information server which provides detailed information about said broadcast summary information from a group of time acquired by said 1st meansand a channel designatorAn information providing device possessing 3rd means to require detailed information from this information server using an address of said acquired information serverand to acquire detailed information from this information server.

[Claim 2] Channel identification information to whichas for said 2nd meansthis outline broadcast is beforehand carried out with broadcasting hours of outline broadcastDetailed information corresponding to this summary information. Channel identification information which has 1 or the held table and to which broadcast—times information on said outline broadcast and said outline broadcast are carried out in data which made a lot matching information with an address of a held information server is considered as an inputThe information providing device according to claim 1 obtaining an address of an information server applicable by referring to said table.

DETAILED DESCRIPTION

[Detailed Description of the Invention] [0001]

[Field of the Invention] Especially this invention relates to the art for providing a user with information with the combination of broadcasting media and the communication medium by a computer network about an information providing device.

[0002]

[Description of the Prior Art] There are broadcasting mediasuch as television radioas a means to deliver the same information simultaneously to much human beings (henceforth a user) distributed over a wide area. Howevera means by which a user chooses information is only selection of the information dispatch broadcasting station by the channel change of broadcast receiving terminals such as a television set which a user uses and a radio set. For this reasonal though the information to deliver is generally a lot of information for many

usersthe detail of each information is not suitable as a means to deliver detailed information to a small number of user who becomes a tendency which becomes less enough and has deep concern in specific Redirection Information.

[0003] It is possible for a means to acquire the variety of information which the information server distributed all over the world provides to be established via a computer network on the other handand to acquire these information from the computer (henceforth a user terminal) of an ordinary home through a telephone line. Hereit is possible to acquire the information which each user needs in large quantities and in detail unlike broadcasting media.

[0004] In order for a user to acquire required information from the information server connected to the computer networkthe existence position (henceforth the address of an information server) in the network of the information server must be known. Howevera brief means for a user to acquire easily the address of the information server which provides required informationand use it does not exist.

[0005]

[Problem(s) to be Solved by the Invention] This invention transmits the address of an information server with summary information using broadcasting media to a userand an object of this invention is to provide detailed information to the user who tries acquisition of information using the address of the information server. It aims at an unfamiliar user enabling it to use for use of a computer simply by not needing explicit specification of the address of the information server by a user in particular.

[0006]

[Means for Solving the Problem] In order to solve an aforementioned probleman information providing device of this inventionA means to acquire time which acquired summary information which needs information with a detailed user from a broadcast receiving terminaland a channel designator which a user had chosen at the timeIt is characterized [main] by having a means to acquire an address of an information server which provides detailed information from a group of time and a channel designator which were acquiredand a means to acquire detailed information from an information server using an address of an information server with a user's directions.

[0007] The operation of this invention is as follows. An information provider delivers summary information of information provided using broadcasting media to a user. While a user acquires this summary informationwhen it needs detailed informationhe transmits a detailed

information acquisition request to a user terminal at time when this summary information is broadcast. If a demand from a user is received a user terminal will transmit generation times of a users requestand a channel designator which a user had chosen to an address server with which an address is beforehand recorded on a user terminal. In an address serverusers request generation times and a channel designator are changed into an address of an information server which an information provider uses for offer of detailed informationand the result is transmitted to a user terminal. The user terminal can acquire detailed information which an information provider provides by using an address of this information server.

[0008] It is realizable using simple devices such as a push button to tell a detailed information acquisition request from a user to a user terminal for example. This also enables an unfamiliar user to acquire detailed information easily to use of a computer.

[0009]

[Embodiment of the Invention] Belowan embodiment of the invention is described using a drawing. <u>Drawing 1</u> shows the composition of the example of this invention <u>drawing 2</u> shows the example of the conversion table for address translationand <u>drawing 3</u> shows the processing flow chart of the example of this invention.

[0010] A user uses the broadcast receiving terminal 1 and the user terminal 2. The users request acquisition part 21the time acquisition part 22the channel designator acquisition part 23the detailed information demand part 24 and the detailed information acquisition part 25 are contained in the user terminal 2. The broadcast receiving terminal 1 and the user terminal 2 are connected so that the channel designator chosen from the broadcast receiving terminal 1 as the channel acquisition part 23 of the user terminal 2 now can be transmitted. The address translating part 31 is contained in the address server 3. The exchange of the address server 3 and the information server 4 which the user terminal 2 is connected to the computer networkand are similarly connected to the networkand bidirectional information is possible. [0011] A user acquires the summary information (TV commercial etc.) which an information provider provides using the broadcast receiving terminal 1. When a user acquires the summary information which needs detailed informationa user transmits a demand of detailed information to the users request acquisition part 21 by the input means of a push button or others at the time when the summary information is broadcast. The users request acquisition part 21 acquires a demand of the detailed information (Step S1 of drawing 3) and transmits this to the time

acquisition part 22 and the channel designator acquisition part 23. [0012] The time acquisition part 22 acquires current time immediately (Step S2). The channel designator acquisition part 23 acquires the channel designator chosen now (Step S3). These information is transmitted via a network to the address translating part 31 of the address server 3 with which the address is beforehand recorded on the user terminal 2 (step S4).

[0013] In the address translating part 31 of the address server 3the information which consists of a group of the time transmitted from the user terminal 2 and a channel designator is changed into the address of an information server (Step S5S6). This conversion is realizable when the address server 3 holds a conversion table as shown in <u>drawing 2</u>. Summary information broadcast start timesummary information broadcast finish timeand a channel designator are stored in a conversion tableand the address (server address) of the corresponding information server is set to it.

[0014] The address of the information server obtained by conversion is transmitted to the detailed information demand part 24 of the user terminal 2 (Step S7). In the detailed information demand part 24the user terminal 2 requires transfer of detailed information from the information server 4 using the address of the information server acquired from the address server 3 (Step S8S9). The information server 4 will return the demanded detailed informationif a transfer demand of detailed information is received from the user terminal 2 (Step S10S11). The user terminal 2 shows a user the detailed information returned from the information server 4 via the detailed information acquisition part 25 (Step S12).

[0015]Herealthough the broadcast receiving terminal 1 and the user terminal 2 were explained as another devicewhen the user terminal 2 has a broadcast receiving function the user terminal 2 and the broadcast receiving terminal 1 may be the same devices. Although the address server 3 with the address translating part 31 explained the example connected to the user terminal 2 via the network The user terminal 2 provided with the address translating part which changes the group of broadcast times and a channel designator into the address of the information server 4 a priori can also be realized using an accessible storage etc.

[0016]

[Effect of the Invention] By this inventionan information provider becomes possible [transmitting the address of an information server to many users]. A user chooses required information based on the summary

information provided by broadcasting mediaand he can acquire detailed informationwithout specifying the address of an information server clearly.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

<u>[Drawing 1]</u> It is a block diagram showing the composition of the example of this invention.

<u>[Drawing 2]</u> It is a figure showing the example of the conversion table for address translation.

<u>[Drawing 3]</u>It is a processing flow chart of the example of this invention.

[Description of Notations]

- 1 Broadcast receiving terminal
- 2 User terminal
- 21 Users request acquisition part
- 22 Time acquisition part
- 23 Channel designator acquisition part
- 24 Detailed information demand part
- 25 Detailed information acquisition part
- 3 Address server
- 31 Address translating part
- 4 Information server